

525,451

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number  
**WO 2004/032347 A1**

(51) International Patent Classification<sup>7</sup>: **H04B 1/10, 7/216**

(21) International Application Number:  
PCT/SG2002/000194

(22) International Filing Date: 28 August 2002 (28.08.2002)

(25) Filing Language: English

(26) Publication Language: English

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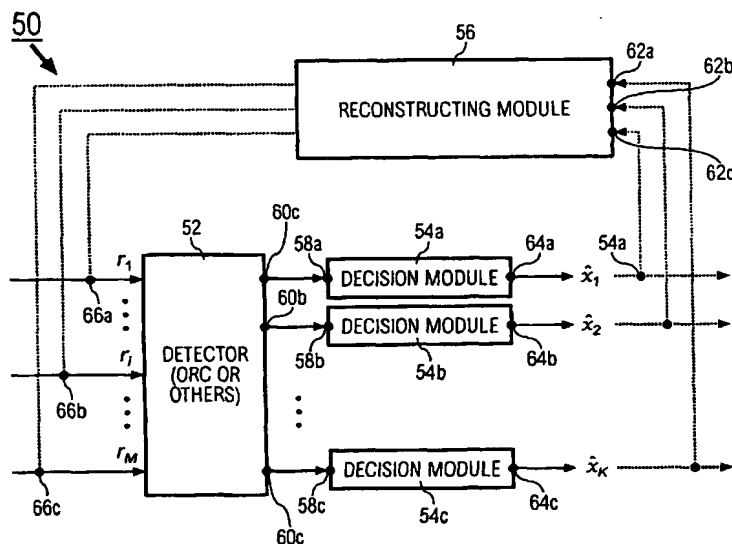
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: RECEIVER HAVING A SIGNAL RECONSTRUCTING SECTION FOR NOISE REDUCTION, SYSTEM AND METHOD THEREOF



(57) Abstract: A signal reconstructing section (50), a receiver having the signal reconstructing section (50), a communication system having the receiver, and a method for reducing noise in a transformed signal having a plurality of signal components and using the signal reconstructing section (50) are described. The signal reconstructing section (50) of the receiver has a detector (52) for detecting the transformed signal, decision modules (54) each having an input (58) coupled to output (60) of the detector, and a reconstructing module (56) having inputs (62) respectively coupled to output (64) of the decision modules (54). The reconstructing module (56) is adapted to reconstruct one or more subcarriers of the plurality of subcarriers a predetermined number of times to thereby form a noise-reduced transformed signal. Reconstruction of the one or more subcarriers is performed one at a time or two or more simultaneously.

WO 2004/032347 A1



**Published:**

— with international search report

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